Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (Canceled)

13. (Currently Amended) A pseudo random number generator comprising:

a cipher unit to generate a sequence of ciphering bits to cipher a stream of data including at least video data; and

a state machine coupled to the cipher unit to also use the ciphering unit to generate a plurality of pseudo random numbers based on selected ones of said cipher bits wherein the state machine is equipped to transition to a continuous clocking state that includes, upon power on or reset, causing the cipher unit to be continuously clocked to introduce entropy into the cipher unit, wherein the state machine operates in one of four states: a continuous clocking state (E0), a first cipher bit taking state (E1), an output state (E2), a second cipher bit taking state (E3), and an active state (also referred to as the authenticated state), and during operation, the state machine enters state E0 upon power on and while in state E0, the state machine causes the cipher unit to be continuously clocked to incorporate entropy into the cipher unit, from state E0, the state machine transitions to the state E1, first cipher bit taking state, upon receipt of a request for a first pseudo random number, after clocking the cipher units for n clocks, where n is an integer, in state E1, the state machine causes a number of the output ciphering bits of the cipher

unit be taken and stored into a temporary storage location for output, from state E1, the state machine enters the state E2, upon storing the taken ciphering bits, in state E1, the state machine causes the stored ciphering bits to be output as the requested pseudo random number, in state E3, the state machine causes a number of the output ciphering bits of the cipher unit be taken and stored into a temporary storage location for output, in the active state, the cipher unit is used to generate ciphering bits to cipher the video before transmitting to a video receiving device and the cipher unit is not available for pseudo random number generation, from the active state, the state machine transitions back to E0, the continuous clocking state, if the authentication unit is notified of the video receiving device becoming unauthorized or becoming detached from the video source device.

14. (Canceled)

15. (Currently Amended) The pseudo random generator of claim 13 [[14]], wherein the state machine is equipped to transition from said continuous clocking state to said first cipher bit taking state, in response to a subsequent request after n clocks for said first pseudo random number, where n is an integer, and to transition from said first cipher bit taking state to said output state, upon storing the first output cipher bits.

16. (Currently Amended) The pseudo random generator of claim 13 [[14]], wherein the state machine is equipped to transition from said output state to a selected one of the continuously clocking state, the second cipher bit taking state, and the

authenticated state depending on whether upon provision of the first pseudo random number, an indication of an unsuccessful authentication using the first pseudo random number, another request for a second pseudo random number, or an indication of a successful authentication using the first pseudo random number is received.

17. (Currently Amended) The pseudo random generator of claim 13 [[14]], wherein the state machine is equipped to transition from said second cipher bit taking state to said output state upon taking the second plurality of output cipher bits of the cipher unit and storing the second output cipher bits.

18. (Currently Amended) The pseudo random number generator of claim 13 [[14]], wherein the state machine is further equipped to transition from said authenticated state to said second cipher bit taking state upon receiving another request for a third pseudo random number, and to said continuously clocking state upon receiving a selected one of an unauthenticated notification and a detachment notification.